TA-F222ESR/F530ES

SERVICE MANUAL



Canadian Model AEP Model UK Model

E Model

photo: TA-F530ES

SPECIFICATIONS

Amplifier section

ltem	Cor	ndition	Data		
Continuous RMS power outut (both channels driven	4 ohms, 20 Hz-20 kHz THD Canadian, UK, E model 0.008%		120 W + 120 W (THD 0.01%) (DIN: 160 W + 160 W)		
imultaneously)	6 ohms, 20 Hz-20 kHz THD 0.006%	Canadian, UK, E model	100 W + 100 W (DIN: 120 W + 120 W)		
		AEP, West Germany model	95 W + 95 W (DIN: 115 W + 115 W)		
	8 ohms, 20 Hz-20 kHz THD 0.004%	Canadian, UK, E model	90 W + 90 W (DIN: 110 W + 110 W)		
		AEP, West Germany model	80 W + 80 W (DIN: 100 W + 100 W)		
Power band width (IHF)	8 ohms, THD 0,02%		10 Hz - 100 kHz at 45 W		
Dynamic headroom ('78 IHF)	4 ohms		2 dB		
	8 ohms		1.2 dB		
Total harmonic distortion	8 ohms, at 10 watt output		0.003%		
Intermodulation (IM) distortion	4 ohm, at rated output		0.008%		
60 Hz: 7 kHz = 4:1	6 ohms at rated output		0.006%		
	8 ohms at rated output		0.004%		
Damping factor	8 ohms, 1 kHz		50		
Residual noise	network A		less than 90μV		
Frequency response	PHONO MM		RIAA equalization curve ±0.2 dB		
	TUNER, CD, TAPE 1, 2, 3, DI	RECT IN	2 Hz – 200 kHz +0 dB		

-Continued on page 2-





ltem		Condition	Data
Input sensitivity	PHONO	МС	0.17 mV, 100 ohms.
		MM	2.5 mV, 50 kohms
	TUNER, CO	D, DIRECT IN, TAPE 1, 2, 3 IN	150 mV, 50 kohms
S/N (network)	PHONO MC		68 dB 76 dB* (A)
	MM		80 dB 87 dB* (A)
78 (IHF)	TUNER, CI ADAPTOR	D, DIRECT IN, TAPE 1, 2, 3 IN	84 dB 105 dB (A)
Output voltage impedance	REC OUT 1		150 mV, 1 kohm
	HEADPHO	NES	25 miliwatts (at 8 ohms) Accepts low and high impedance headphones.
Tone controls	BASS, at 100 Hz		±6 dB (turnover freq. 400 Hz)
	TREBLE, a	t 10 kHz	±6 dB (freq. 4 kHz)

General

System

Preamplifier section: Low-noise high gain NFB type equalizer amplifier, passive type direct tone control Power amplifier section: Pure-complementary SEPP power amplifier

Power requirements

AEP, West Germany model: 220 V AC, 50 Hz

U K model: 240 V AC, 50 Hz E model : 120 V, 220 V or 240 V AC

adjustable, 50/60 Hz

Canadian model: 120 V AC, 50/60Hz

Power consumption

Canadian model	510 VA
AEP, UK, West Germany model	220 W
UK model	600 W
E model	340 W

AC outlet

Canadian model	2 switched, 1 unswitched, 100 watts max. each
AEP, UK, West Germany model	_
E model	1 switched, 1 unswitched, 100 watts each

Dimensions

Approx. $430 \times 150 \times 370 \text{ mm (w/h/d)}$ (17 x 5⁷/₈ x 14⁹/₁₆ inches)

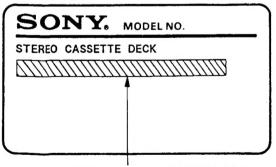
Weight

Approx. 13.5 kg (29 lbs 13 oz) net

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MODEL IDENTIFICATION

- Specification Label -



Canadian model: AC 120V 60Hz

AEP, West Germany model: AC 220V~50/60Hz

UK model: AC 240V~50/60Hz

E model: AC 120/220/240V~50/60Hz ·

Section	<u>Title</u>	Pa	ge
Specification ·····			1
Model Identification · · · · · ·			2
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SERVICING NOTES

On operating voltage

Before operating the unit, check that the operating voltage of your unit is identical with the voltage of your local power supply.

Where purchased	Operating voltage
UK Model	240 V AC
Canadian Model	120V AC
AEP, West Germany Model	220 V AC
E Model	120 V, 220 V or 240 V AC adjustable by AC voltage selector

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

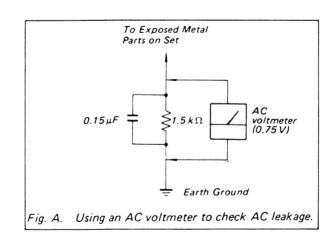
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

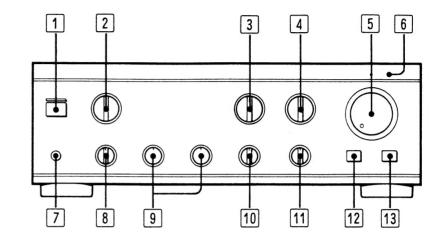
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



SECTION 1 GENERAL

PARTS IDENTIFICATION



1 POWER switch and power/standby indicator

Immediately after turning ON the power, the standby indicator lights in red as the built-in muting circuit activates.

When the amplifier stays in a stable operating condition, the indicator lights in green.

The indicator lights in red when the unit detects shorting of circuit of the speaker outputs or in case of short-circuit of the inputs of DC components.

In such a case, disconnect the power source and check the connected components and speaker systems.

2 SPEAKERS selector

Select speaker system A or B, or both.

3 ADAPTOR/DIRECT IN switch

Set to NORMAL to select program source by INPUT SELECTOR. To listen to a program source processed through adapter (graphic equalizer, for example) connected to ADAPTOR jacks, set the selector to ADAPTOR.

To listen to a program source connected to DIRECT IN jacks, set it to DIRECT IN.

Note that selecting ADAPTOR has no effect upon the signals output through the REC OUT jacks.

4 INPUT SELECTOR

Selects the desired program source.

5 ATTENUATOR knob

Regulates the sound level.

6 MUTING switch and indicator

Generally, keep the switch released (OFF). Depress the switch to reduce the sound level by 20 dB. (Output voltage becomes 1/10.)

7 HEADPHONES jack (stereo phone jack)

8 MODE selector

STEREO: For listening to a stereo program. MONO: For listening to a monaural program.

9 BASS and TREBLE controls

10 REC OUT SELECTOR

Selects the program source sent to the REC OUT jacks (rear panel).

11 BALANCE control

Controls the sound level of left and right speakers.

12 SOURCE DIRECT switch and indicator

13 CARTRIDGE selector

Set the selector according to your cartridge MM: For moving-magnet type cartridge MC: For moving-coil type cartridge

PRECAUTIONS

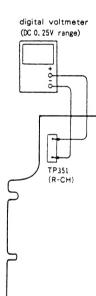
1. Adjust the id

2. Always make the power an

[IDLING ADJUST

Procedure:
Set the ATTENU
adjust RT301 (L
voltmeter reads 7

Adjustment Location



SECTION 2 ELECTRICAL ADJUSTMENTS

PRECAUTIONS

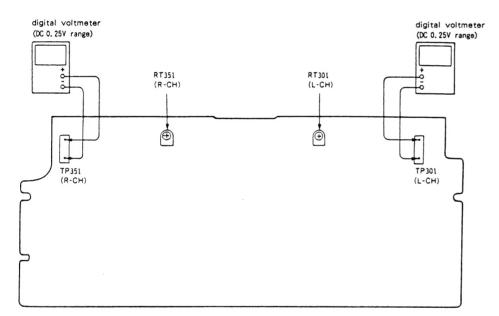
- 1. Adjust the idling after tuning the unit on for about 10-15 minutes, giving it time to warm up.
- 2. Always make sure to adjust the idling when repairing the power amp section or when replacing any parts.

[IDLING ADJUSTMENT]

Procedure:

Set the ATTENUATOR control as low as possible and adjust RT301 (L-CH) and RT351 (R-CH) so that the voltmeter reads 7mV at TP301 (L-CH) and TP351 (R-CH).

Adjustment Location: power board





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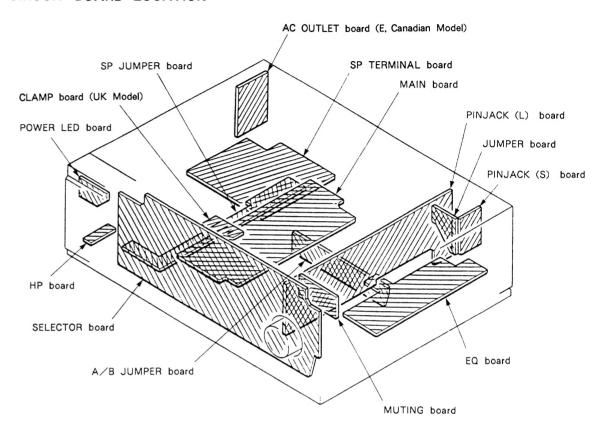
of left and right speakers.

h and indicator

g to your cartridge. type cartridge e cartridge

SECTION 3 DIAGRAMS

CIRCUIT BOARD LOCATION



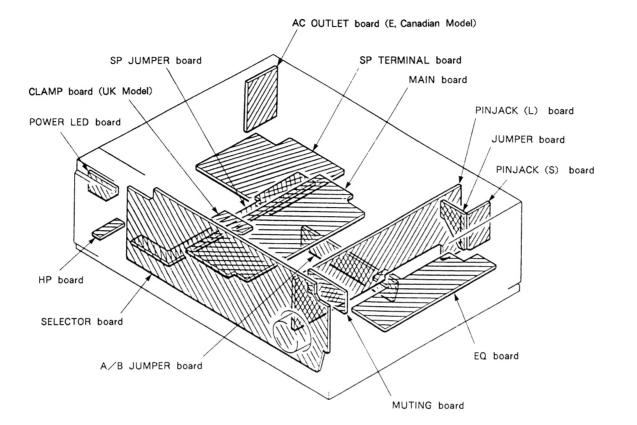
TION 2 **ADJUSTMENTS**

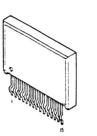
SECTION 3 DIAGRAMS

CIRCUIT BOARD LOCATION

Semiconductor Lead Layouts

STK-3102-3







2SC3423



SEL2810A

SEL2510C



US1060M UZL-16L 10E2N 30DF2

2SC2921M-0

2SA1215M-0



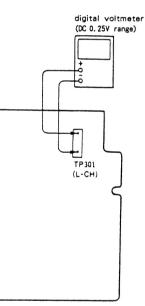


2SA985A 2SC2275-P









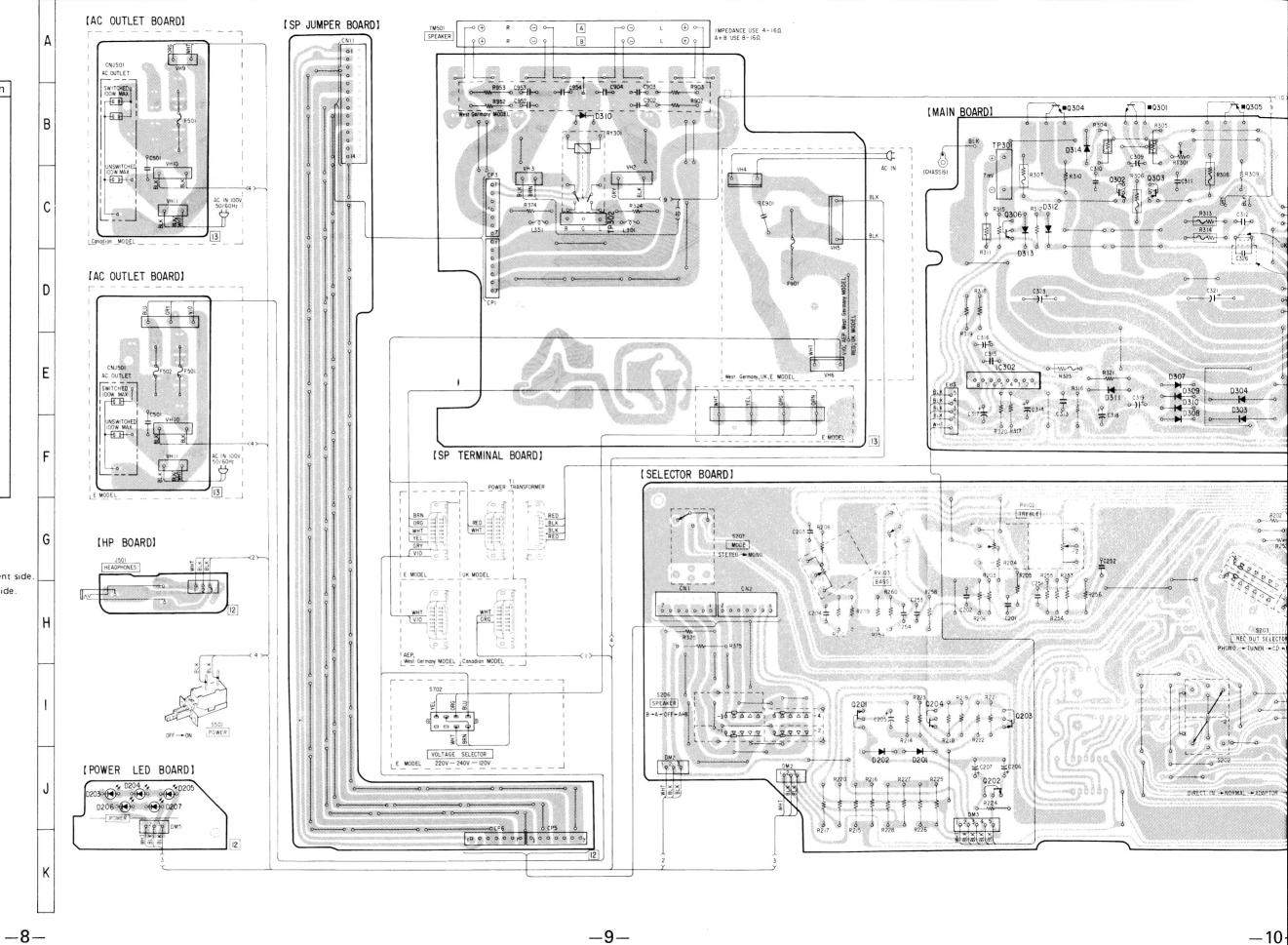
3-1. PRINTED WIRING BOARDS · See page 7 for Semiconductor Lead Layouts. 1 2 3 4 5 6

Semiconductor Location

Semiconductor Location								
Ref. No.	Location	Ref. No.	Location					
D201	J-11	IC301	1-30					
D202	J-11	IC302	E-12					
D203	J-1	IC401	E-30					
D204	J-2							
D205	J-2	Q201	I-10					
D206	J-1	Q202	J-12					
D207	J-2	Q203	I-12					
D208	G-19	Q204	I-11					
D209	K-20	Q301	B-14					
D301	E-17	Q302	C-14					
D302	F-17	Q303	C-14					
D303	F-15	Q304	B-13					
D304	E-15	Q305	B-15					
D305	E-18	Q306	C-12					
D306	E-18	Q351	B-18					
D307	E-14	Q352	C-18					
D308	F-14	Q353	C-18					
D309	E-14	Q354	B-19					
D310	F-14	Q355	B-17					
D311	E-14	Q356	C-20					
D312	C-13	Q401	D-30					
D313	C-12	Q402	D-30					
D314	B-13	Q403	F-31					
D319 D362	B-7	Q404	F-21 D-29					
	C-19	Q451 Q452	D-29 D-29					
D363 D364	C-20 B-19	Q452	0.29					
D364 D401	F-30							
D401 D402	F-30							
D402	F-29							
5405	1.23							

Note on Printed Wiring Boards:

- o----: parts extracted from the component side.
- parts mounted on the conductor side.

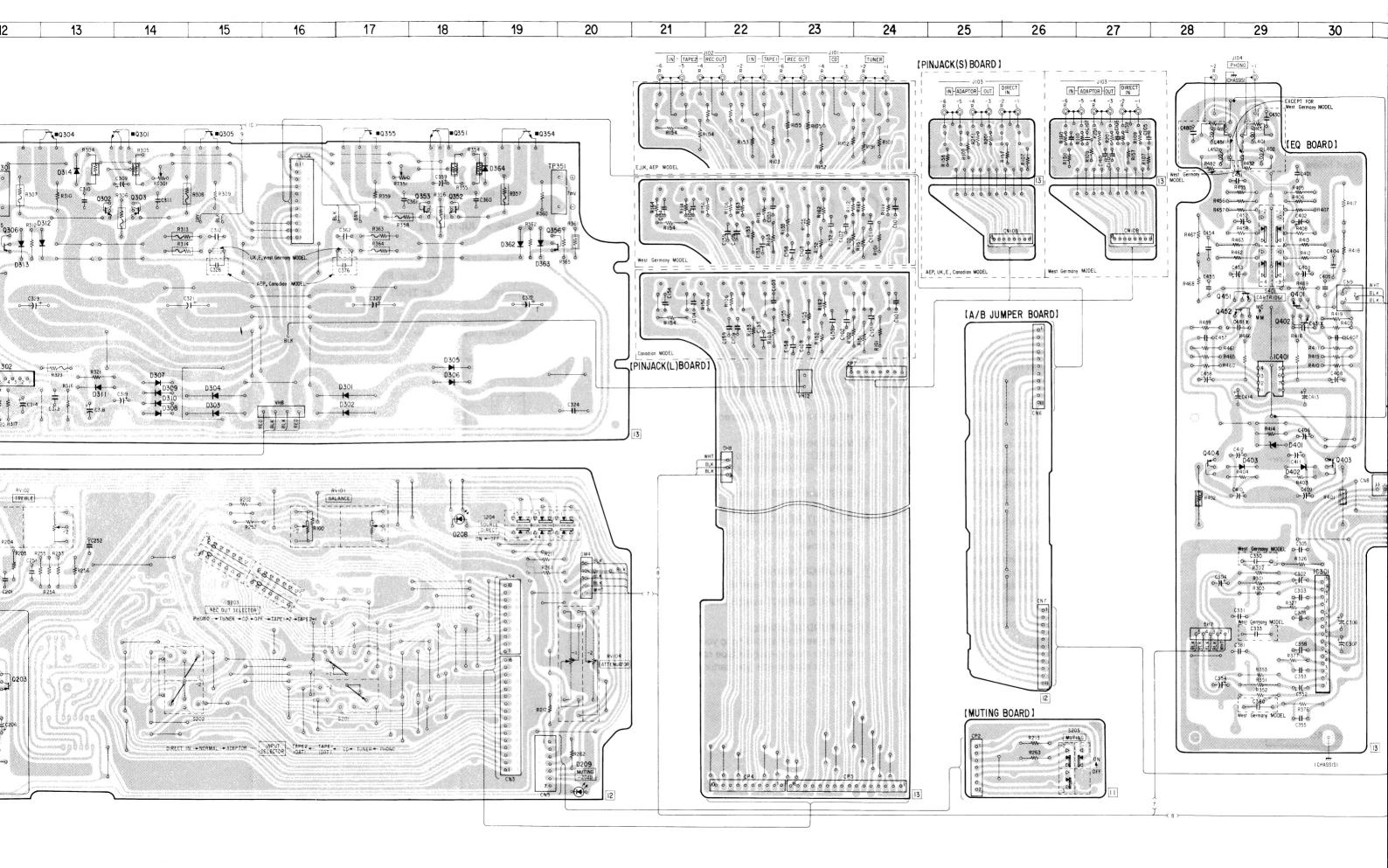


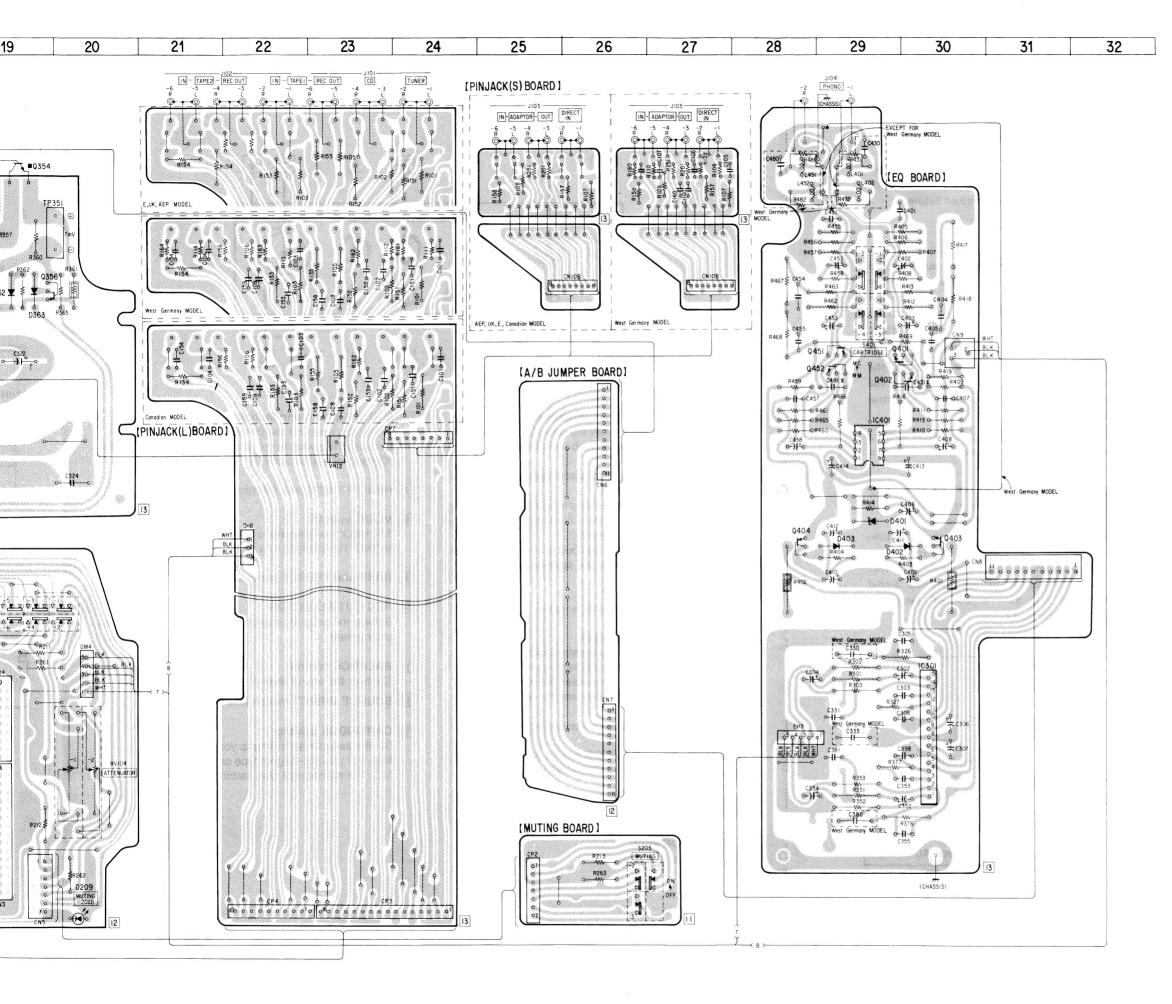
12

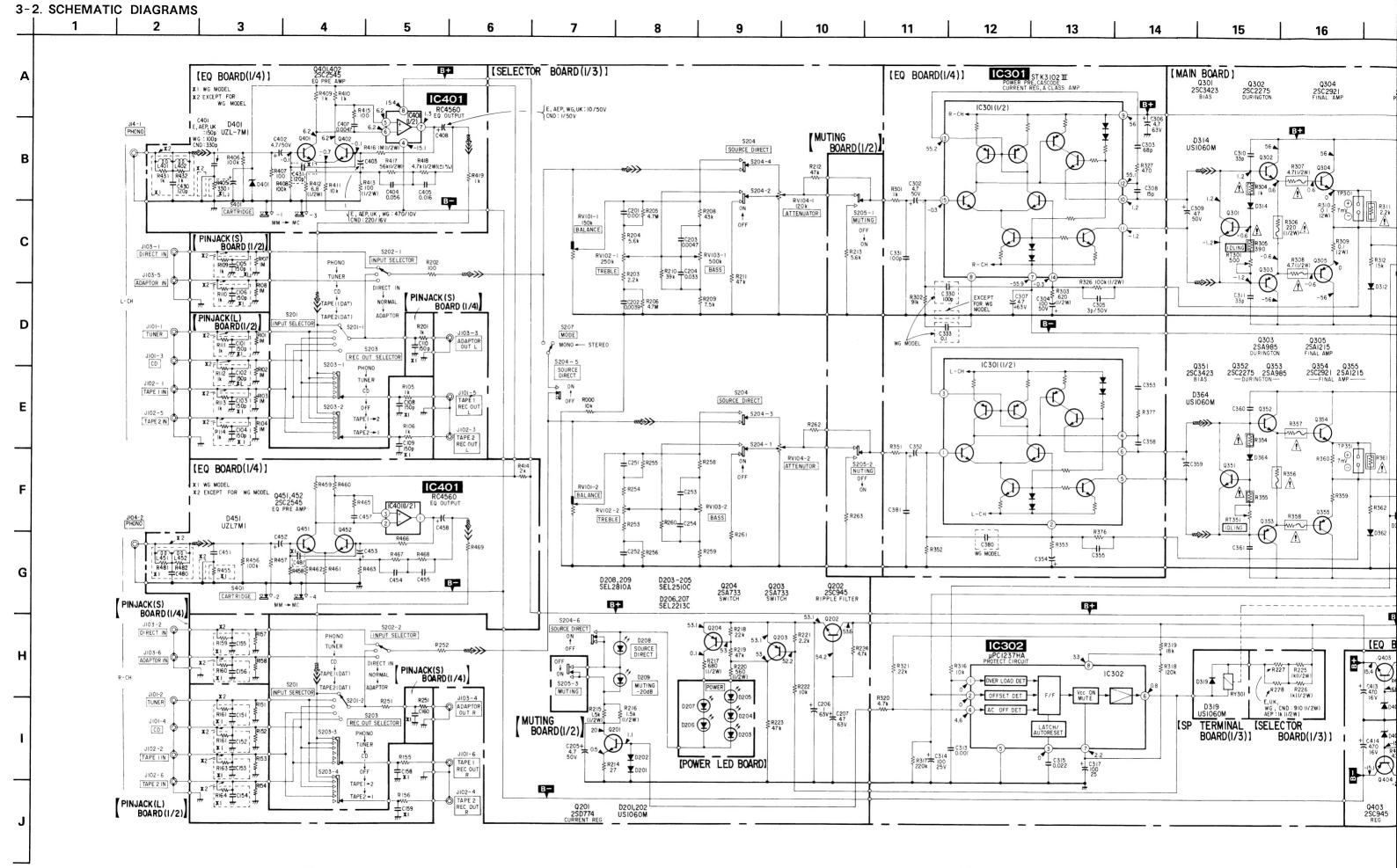
11

13

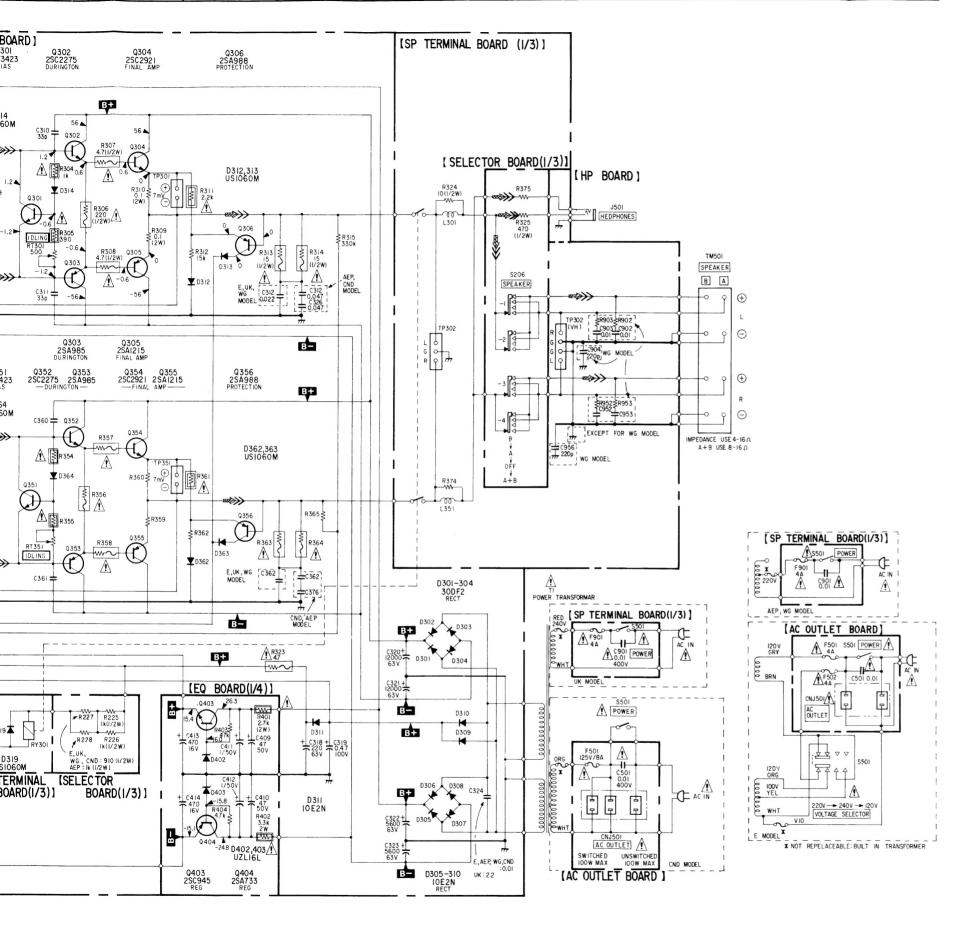
14











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Note on Schematic Diagrams:

- All capacitors are in μF unless otherwise noted. pF: $\mu \mu F$ 50WV or less are not indicated except for electrolytics
- All resistors are in Ω and 1/4 W or less unless otherwise
- Components for right channel have same values as for left channel
- : nonflammable resistor.
- fusible resistor

Note:	Note:
The components identi-	Les composants identifiés par
fied by mark / or dot-	une marque <u>(1</u> sont critiques
ted line with mark /	pour la sécurité.
are critical for safety.	Ne les remplacer que par une
Replace only with part	pièce portant le numéro spéci-
number specified.	fié.

- adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark: PHONO
- Voltages are taken with a VOM. (Input impedance $10M \Omega$) Voltage variations may be noted due to normal production torerances.
- Signal path.

PHONO

• WG : West Germany

• CND : Canadian

SECTION 4 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example: (RED) ... KNOB, BALANCE (WHITE)
- Cabinet's Color Parts' Color

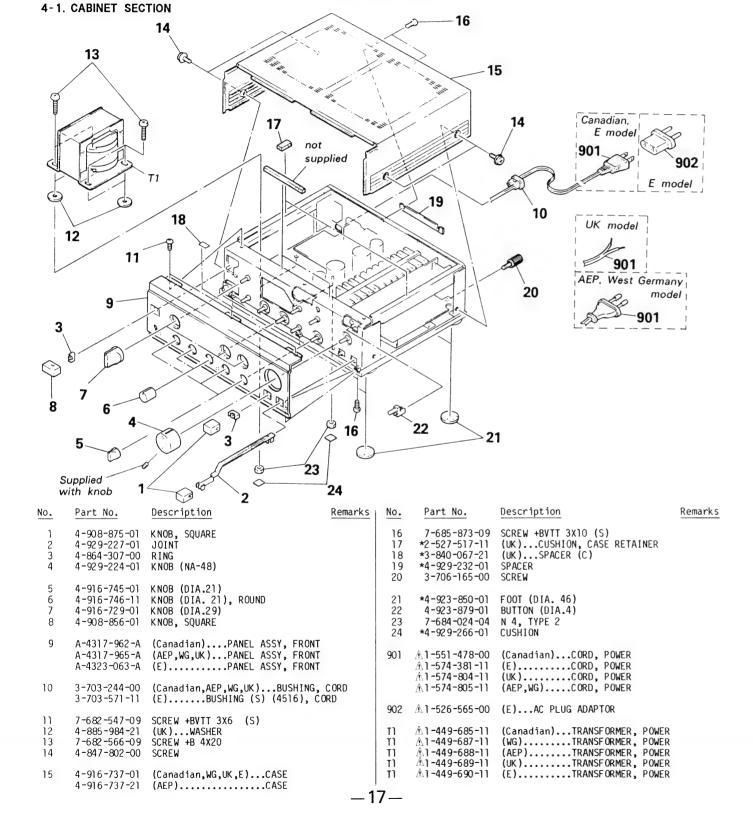
 WG: West Germany model

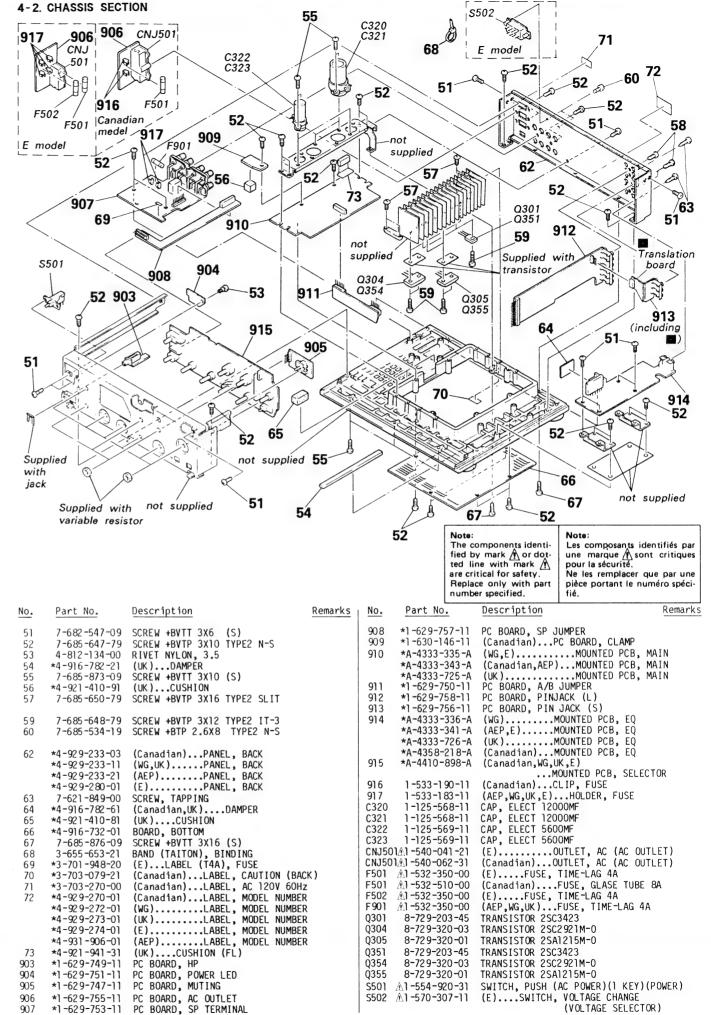
The components identified by mark \bigwedge or dotted line with mark \bigwedge are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque A sont critiques pour la sécurité.

Ne les remplacer que par une

Ne les remplacer que par une pièce portant le numéro spécifé.





NOTE:

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C158

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*1-6

*1-6

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*A-4

*A-4

*A-4

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SECTION 5 ELECTRICAL PARTS LIST

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Remarks

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS: MF: μF, PF: μμF.

RESISTORS

All resistors are in ohms.
F: nonflammable

COILS • MMH: mH, UH: μH

SEMICONDUCTORS

In each case, U: μ , for example: UA...: μ A..., UPA...: μ PA..., UPC...: μ PD...

• WG : West Germany model

The components identified by mark A or dotted line with mark are critical for safety.

Replace only with part number

Les composants identifiés par une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No. Part No. Description Ref.No. Part No. Description													
#1-574-381-11 (E)	Ref.No.	Part No.	Description				Ref.No.	Part No.	Description				
902		<u>↑</u> 1-574-381-11 <u>↑</u> 1-574-804-11	(E)CORD,	POWER POWER			C204	1-136-159-00	FILM	0.033MF	5 %	50	٧
905 *1-629-747-11 PC BOARD, MUTING C252 1-130-478-00 MYLAR 0.0039MF 5% 50V 907 *1-629-753-11 PC BOARD, AC DUTLET C254 1-136-159-00 FILM 0.033MF 5% 50V 907 *1-629-753-11 PC BOARD, PERMINAL C302 1-123-369-00 ELECT 4.7MF 20% 50V 909 *1-630-1461-11 (Canadian)PC BOARD, CLAMP C303 1-104-276-00 (Canadian)K)	903	*1-629-749-11	PC BOARD, HP				C207	1-124-918-11	ELECT	47MF	20%	63	Y
909 *1-630-146-11 (Canadian)PC BOARD, CLAMP 910 *A-4333-335-A (W.C.)	906	*1 -629-755-11	PC BOARD, MUTING PC BOARD, AC OUTLE	Т			C253 C254	1-130-479-00 1-136-159-00	MYLAR FILM	0.0047MF 0.033MF	5 % 5 %	50 50	٧
10					LAMP				(Canadian, UK)			
912 *1-629-758-11 PC BOARD, PINJACK (L) 913 *1-629-758-11 PC BOARD, PINJACK (S) 914 *A-4333-336-A (MG)	910	*A-4333-343-A	(Canadian, AEP)M	OUNTED	PCB, N	MIAN			(E,AEP,WG)	ELECT	100MF	20%	50V _
914 *A-4333-336-A (WG)MOUNTED PCB, EQ	912	*1 - 62 9 - 75 8 - 11	PC BOARD, PINJACK	(L)									
*A-4333-726-A ((K)MOUNTED PCB, EQ (308 1-102-951-00 (E,AEP,MG)CERAMIC 15PF 5% 50V (208 1-104-263-00 (Canadian, MG)CERAMIC 15PF 10% 125V (Canadian)Gundian, MG,UK,E)MOUNTED PCB, SELECTORMOUNTED PCB, SELECTORMOUNTED PCB, SELECTOR		*A-4333-336-A	(WG)MOUNT	ED PCB									
915 *A-4410-898-A (Canadian, WG, UK, E) 916 1-533-190-11 (Canadian)CLIP, FUSE 917 1-533-183-11 (AEP, WG, UK, E)HOLDER, FUSE 918 1-533-183-11 (AEP, WG, UK, E)HOLDER, FUSE 919 1-533-183-11 (AEP, WG, UK, E)HOLDER, FUSE 919 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C102 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C103 1-107-159-00 (UK)MICA 33PF 5% 50V C103 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C105 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C106 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C109 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C115 1-130-487-00 (AEP, Canadian)FILM 0.047MF 5% 50V C115 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C115 1-130-487-00 MYLAR 0.001MF 5% 50V C115 1-130-487-00 MYLAR 0.002MF 20% 63V C115 1-130-487-00 MYLAR 0.002MF 20% 63V C115 1-		*A-4333-726-A	(UK)MOUNT	ED PCB	, EQ				(Canadian, UK)			
916 1-533-190-11 (Canadian)CLIP, FUSE 917 1-533-183-11 (AEP,WG,UK,E)HOLDER, FUSE 039 1-124-910-11 (UK)ELECT 47MF 20% 50V 07 07 07 07 07 07 07 07 07 07 07 07 07	915	*A-4410-898-A	(Canadian,WG,UK,E)								15PF	10%	125V
C101 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C103 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C104 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C105 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C106 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C107 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C108 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C109 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C109 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C105 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C108 1-123-379-00 ELECT 100MF 20% 25V C108 1-123-379-00 ELECT 100MF 20% 25V C108 1-123-379-00 ELECT 100MF 20% 20% 63V C108 1-123-379-00 ELECT 100MF 20% 20% 100V C108 1-123-379-00 ELECT 100MF 20% 100V C108 1-123-379-00 ELECT			(Canadian)CLIP,	FUSE		TOR			EL	ECT			
C102 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C103 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C104 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C105 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C106 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C107 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C108 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C109 1-123-333-00 ELECT 100MF 20% 25V C109 1-123-339-00 ELECT 100MF 20% 25V C109 1-123-3604-00 ELECT 100MF 20%	C101	1-162-284-31	(WG)CERAMIC 15	50PF	10%	50V	C310	1-102-963-00					
C105 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C311 1-107-159-00 (UK)MICA 33PF 5% 50V C311 1-107-159-00 (UK)MICA 33PF 5% 50V C311 1-107-159-00 (UK)MICA 33PF 5% 50V C312 1-130-487-00 (E,WG,UK)MYLAR 0.022MF 5% 50V C312 1-136-161-00 (AEP,Canadian)FILM 0.047MF 5% 50V C312 1-136-161-00 (AEP,Canadian)FILM 0.047MF 5% 50V C312 1-136-161-00 (AEP,Canadian)FILM 0.047MF 5% 50V C313 1-130-471-00 MYLAR 0.001MF 5% 50V C314 1-123-333-00 ELECT 100MF 20% 25V C315 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C314 1-123-333-00 ELECT 100MF 20% 25V C315 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C315 1-130-487-00 MYLAR 0.002MF 5% 50V C316 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-130-487-00 ELECT 100MF 20% 25V C315 1-130-487-00 ELECT 100MF 20% 25V C315 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-123-333-00 ELECT 100MF 20% 25V C316 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-123-333-00 ELECT 100MF 20% 25V C316 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-123-379-00 ELECT 0.47MF 20% 100V C320 1-125-568-11 CAP, ELECT 12000MF 20% 25V C320 1-125-568-11 CAP, ELECT 12000MF C321 1-125-568-11 CAP, ELECT 12000MF C321 1-125-569-11 CAP, ELECT 5600MF		1-162-284-31	(WG)CERAMIC 15	50PF	10%	50V-			CE	RAMIC			
C106 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C108 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C109 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C151 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C152 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C153 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C154 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C155 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C156 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C157 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C158 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C159 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C150 1-162-284-31 (WG)							C311	1-102-963-00			2205	5 W	504
C109 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C151 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C152 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C153 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C154 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C154 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C155 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C156 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-123-333-00 ELECT 100MF 20% 25V C315 1-130-487-00 MYLAR 0.022MF 5% 50V C315 1-130-487-00 MYLAR 0.022MF 5% 50V C315 1-130-487-00 ELECT 100MF 20% 25V C315 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-123-300-0 ELECT 100MF 20% 63V C319 1-123-379-00 ELECT 0.47MF 20% 100V C319 1-123-379-00 ELECT 0.47MF 20% 100V C320 1-125-568-11 CAP, ELECT 12000MF C321 1-125-568-11 CAP, ELECT 12000MF C321 1-125-568-11 CAP, ELECT 12000MF C321 1-125-569-11 CAP, ELECT 5600MF							C311	1-107-159-00					
C152	C109	1-162-284-31	(WG)CERAMIC 15	OPF	10%	50V							
C155 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C318 1-123-333-00 ELECT 100MF 20% 25V C318 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C319 1-123-379-00 ELECT 220MF 20% 63V C319 1-123-379-00 ELECT 0.47MF 20% 100V C319 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C320 1-125-568-11 CAP, ELECT 12000MF C321 1-125-568-11 CAP, ELECT 12000MF C321 1-125-569-11 CAP, ELECT 12000MF C321 1-125-569-11 CAP, ELECT 5600MF C322 1-125-569-11 CAP, ELECT 5600MF	C152 C153	1 -162 -284 -31 1 -162 -284 -31	(WG)CERAMIC 15 (WG)CERAMIC 15	50PF 50PF	10%	50V 50V	C314	1-123-333-00	ELECT	100MF	20%	25	٧
C320 1-125-568-11 CAP, ELECT 12000MF C159 1-162-284-31 (WG)CERAMIC 150PF 10% 50V C201 1-130-471-00 MYLAR 0.001MF 5% 50V C322 1-125-569-11 CAP, ELECT 5600MF	C155 C156	1 -162 -284 -31 1 -162 -284 -31	(WG)CERAMIC 15 (WG)CERAMIC 15	50PF 50PF	10% 10%	50V 50V	C318	1-123-604-00	ELECT	220MF	20%	63	٧
	C159 C201	1 -162 -284 -31 1 -130 -471 -00	(WG)CERAMIC 15 MYLAR 0.001N	OPF F	10% 5%	50V 50V	C321 C322	1-125-568-11 1-125-569-11	CAP, ELECT	12000MF 5600MF			

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Ref.No.	Part No.	Description				Ref.No.	Part No.
C324	1-136-601-11	(E,AEP,WG,Canadian) 0.01MF	10%	630V	C410 C410	1-123-359- 1-124-910-
C324	1-136-880-11	(UK)FILM	2.2MF		1600	C411	1-123-380-
C326 C330	1 -136 -161 -00 1 -162 -282 -31	(AEP,Canadian)F (WG)CERAN			50V 50V	C412 C413	1-123-380- 1-126-103-
C331 C331	1-102-973-00 1-136-808-11	(E,AEP,WG)CERAM (UK,Canadian)FIL			50V 100V	C414 C430 C431	1-126-103- 1-102-816- 1-162-282-
C333 C352	1 -161 -370 -00 1 -123 -369-00	(WG)CERAMIC ELECT 4.7MF	0.01MF 20%	30 % 50 V	251	C451	1-101-361-
C353 C353	1-101-888-00 1-104-276-00	(E,AEP,WG)CERAM (Canadian,UK) POLYSTYRE		5% 10%	50V 50V	C451 C451 C451	1-102-112- 1-102-973- 1-104-282-
C354	1-123-360-00	(E,AEP,WG)ELECT	100MF	20%	50V	C452	1-123-369-
C354	1-126-052-11	(Canadian, UK)	100PF	20%	50V	C453 C453 C453	1-124-472- 1-124-120- 1-126-103-
C355 C355	1-102-936-00 1-107-276-11	(E,AEP,WG)CERAM (Canadian,UK)MA	IC 3PF IC 3PF	0.5PF 0.5PF	50V 500V	C454 C454	1-130-341- 1-136-162-
C358 C358	1-102-951-00 1-104-263-00	(E,AEP,WG)CERAMI (Canadian,UK)	IC 15PF	5 %	507	C455	1-130-971-
3333		POLYSTYRE	NE 15PF	10%	1250	C455	1-136-032-
C359	1-123-359-00	(E,AEP,WG,Canadian)) 47MF	20%	50V	C457	1-130-479-
C359	1-124-910-11	(UK)ELECT	47MF		500	C458 C458	1-123-356- 1-123-380-
C360	1-102-963-00	(E,AEP,WG,Canadian)) 33PF	5%	50V	C458	1-126-059-
C360	1-107-159-00	(UK)MICA	33MF	5%	500V	C480 C481	1-102-816- 1-162-282-
C361	1-102-963-00	(E,AEP,WG,Canadian)) 33PF	5%	50V	C501	1-161-744-
C361	1-107-159-00	(UK)MICA	33MF	5 %	5001	C 902 C 903	1-136-153- 1-136-153-
C362 C362	1-130-487-00 1-136-161-00	(E,WG,UK)MYLAR (AEP,Canadian)	0.022MF	5%	50V	C 904	1-102-978-
		FILM	0.047MF	5%	500	C 952 C 953	1-136-153- 1-136-153-
C376	1-136-161-00	(AEP,Canadian)FILM	0.047MF	5%	50V	C 954	1-102-978-
C380	1-162-282-31	(WG)CERAMIC	100PF	5 %	50V	CN1 CN2	*1-561-651- *1-561-651-
C3 81 C3 81	1-102-973-00 1-136-808-11	(E,AEP,WG)CERAM! (Canadian,UK)FIL		5 % 5 %	50V 100V	CN3 CN4	1 -568-118- *1 -562-334-
C401 C401	1-101-361-00 1-102-112-00	(E,AEP)CERAMI	IC 150PF	5% 10%	50V 50V	CN5 CN6	*1-561-651- 1-568-203-
C401 C401	1-102-973-00 1-104-282-11	(WG)CERAMI	C 100PF	5 % 5 %	50V	CN7	1-568-203-
C402	1-123-369-00	ELECT 4.7MF	20%	507		CN8 CN9	*1 -563 -381 - *1 -566 -451 -
C403 C403 C403	1-124-472-11 1-124-120-11 1-126-103-11	(AEP,E,WG)ELECT (Canadian)ELECT (UK)ELECT	470MF 220MF 470MF	20 % 20 % 20 %	10V 16V 10V	CN10 CN11 CN12	*1-563-381- 1-568-117- *1-565-484-
C404 C404	1-130-341-00 1-136-162-00	(UK,Canadian)FIL			100V 50V		111 -540 -041 - 111 -540 -062 -
C405 C405	1-130-971-00 1-136-032-51	(UK,Canadian)FIL			100V 50V	CNP60	14*1 -508-694
C406 C407	1-123-333-00 1-130-479-00	ELECT 100MF MYLAR 0.0047	20%		٥٧	CP1 CP2 CP4	*1-560-532- *1-560-532- *1-568-202-
C408 C408 C408	1-123-356-00 1-123-380-00 1-126-059-11	(E,AEP,WG)ELECT (Canadian)ELECT (UK)ELECT	10MF 1MF 10MF		50V 50V 50V	r	
C409 C409	1-123-359-00 1-124-910-11	(E,AEP,WG)ELE		20% 20%	50V 50V		Note: The compon- fied by mark ted line with

1			
-		23-359-00 24-910-11	(E,AEP,WG)ELECT 47MF 20% 50V (UK,Canadian)ELECT 47MF 20% 50V
	C412 1-1	23-380-00 23-380-00 26-103-11	ELECT 1MF 20% 50V ELECT 1MF 20% 50V ELECT 470MF 20% 16V
	C430 1-1	26-103-11 02-816-00 62-2&2-31	ELECT 470MF 20% 16V (WG)CERAMIC 120PF 5% 50V (WG)CERAMIC 100PF 5% 50V
	C451 1-1 C451 1-1	01-361-00 02-112-00 02-973-00 04-282-11	(E,AEP)CERAMIC 150PF 5% 50V (Canadian)CERAMIC 330PF 10% 50V (WG)CERAMIC 100PF 5% 50V (UK)POLYSTYRENE 150PF 5% 50V
	C452 1-1	23-369-00	ELECT 4.7MF 20% 50V
	C453 1-1	24-472-11 24-120-11 26-103-11	(E,AEP,WG)ELECT 470MF 20% 10V (Canadian)ELECT 220MF 20% 16V (UK)ELECT 470MF 20% 10V
		30-341-00 36-162-00	(UK,Canadian)FILM 0.056MF 3% 100V (E,AEP,WG)FILM 0.056MF 5% 50V
		30-971-00 36-032-51	(UK,Canadian)FILM 0.016MF 3% 100V (E,AEP,WG)FILM 0.016MF 5% 50V
	C457 1-1	30-479-00	MYLAR 0.0047MF 5% 50V
	C458 1-1	23-356-00 23-380-00 26-059-11	(E,AEP,WG)ELECT 10MF 20% 50V (Canadian)ELECT 10MF 20% 50V (UK)ELECT 10MF 20% 50V
The same of the sa	C481 1-1	02-816-00 62-282-31 61-744-00	(WG)CERAMIC 120PF 5% 50V (WG)CERAMIC 100PF 5% 50V CERAMIC 0.01MF 400V
	C903 1-1	36-153-00 36-153-00 02-978-00	(UK)FILM 0.01MF 5% 50V (UK)FILM 0.01MF 5% 50V (WG)CERAMIC 220PF 5% 50V
	C953 1-1	36-153-00 36-153-00 02-978-00	(UK)FILM 0.01MF 5% 50V (UK)FILM 0.01MF 5% 50V (WG)CERAMIC 220PF 5% 50V
	CN2 *1-5	61-651-00 61-651-00 68-118-11	SOCKET, CONNECTOR 7P SOCKET, CONNECTOR 7P SOCKET, CONNECTOR 16P
	CN5 *1-5	62 -334 -00 61 -651 -00 68-203 -11	SOCKET, CONNECTOR 10P SOCKET, CONNECTOR 7P PIN, CONNECTOR (PC BOARD) 11P
		68-203-11 63-381-11 66-451-11	PIN, CONNECTOR (PC BOARD) 11P SOCKET, CONNECTOR 11P HOUSING, CONNECTOR 3P
	CN10 *1-5 CN11 1-5 CN12 *1-5		SOCKET, CONNECTOR 11P SOCKET, CONNECTOR 14P CONNECTOR, BOARD TO BOARD 8P
	CNJ501/1 -5 CNJ501/1 -5		(E)OUTLET, AC (AC OUT LET) (Canadian)OUTLET, AC (AC OUT LET)
	CNP604*1-5	08-694-00	CONNECTOR PIN 8P
	CP2 *1-5	60 -532 -00 60 -532 -00 68 -202 -11	PIN, CONNECTOR 7P PIN, CONNECTOR 7P PIN, CONNECTOR (PC BOARD) 10P

Description

Replace only with part number specified.

pièce portant le numéro spéci-fié.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description			
	1-568-120-11 1-568-120-11 *1-568-204-11	PIN, CONNECTOR (PC BOARD) 7P PIN, CONNECTOR (PC BOARD) 7P PIN, CONNECTOR (PC BOARD) 16P	Q204 Q301 Q302		TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	C3423	Р	
D201 D202 D203	8-71 9-000 -26	DIODE US1060M DIODE US1060M DIODE SEL2510C	Q303 Q304 Q305	8-729-320-03	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	C2921M		
D204 D205 D206	8-71 9-303 -00	DIODE SEL2510C DIODE SEL2510C DIODE SEL2213C	Q306 Q351 Q352	8-729-203-45	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	C3423	·P	
D207 D208 D209	8-71 9-301 -49	DIODE SEL2213C DIODE SEL2810A DIODE SEL2810A	Q353 Q354 Q355	8-729-190-53 8-729-320-03 8-729-320-01	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	C29211	1-0	
D301 D302 D303	8-71 9-230 -02 8-71 9-230 -02 8-71 9-230 -02	DIODE 30DF2	Q356 Q401 Q402	8-729-354-52	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	C2545		
D304 D305 D306	8-71 9-230 -02 8-71 9-200 -77 8-71 9-200 -77	DIODE 10E2N	Q403 Q404 Q451 Q452	8-729-173-36 8-729-354-52	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	A733Q C2545		
D307 D308 D309	8-71 9-200 -77 8-71 9-200 -77 8-71 9-200 -77	DIODE 10E2N	R000 R101 R102	1-247-725-11 1-246-545-00 1-246-545-00	CARBON CARBON	10K 1M 1M	5 % 5 % 5 %	1/4W 1/4W 1/4W
D310 D311 D312	8-71 9-200 -77 8-71 9-200 -77 8-71 9-000 -26		R103 R104 R105	1 -246 -545 -00 1 -246 -545 -00 1 -247 -713 -11	CARBON CARBON	1 M 1 M 1 K	5 % 5 %	1/4W 1/4W 1/4W
D313 D314 D319	8-71 9-000 -26	DIODE US1060M DIODE US1060M DIODE US1060M	R106 R107 R108	1 -249-417-11 1 -246-545-00 1 -246-545-00	CARBON	1K 1M 1M	5% 5% 5%	1/4W 1/4W 1/4W
D362 D363 D364	8-71 9-000 -26	DIODE US1060M DIODE US1060M DIODE US1060M	R109 R110 R111	1-249-417-11 1-249-417-11 1-249-417-11	(WG)CARBON (WG)CARBON (WG)CARBON	1K	5 % 5 % 5 %	1/4W 1/4W 1/4W
D401 D402 D403	8-71 9-001 -97	DIODE HZS782L DIODE UZL-16L DIODE UZL-16L	R112 R113 R114	1-249-417-11 1-249-417-11 1-249-417-11	(WG)CARBON (WG)CARBON (WG)CARBON	1K 1K	5 % 5 % 5 %	1/4W 1/4W 1/4W
	*1-564-508-11	PLUG, CONNECTOR 5P PLUG, CONNECTOR 5P	R151 R152 R153	1 -246 -545 -00 1 -246 -545 -00 1 -246 -545 -00	CARBON	1M 1M 1M	5 % 5 % 5 %	1/4W 1/4W 1/4W
F501 Z		(Canadian)FUSE, GLASE TUBE 8A	R154	1-246-545-00	CARBON	1 M	5%	1/4W
	<u>^</u> 1 -532 -350 -00 <u>^</u> 1 -532 -350 -00	(E)FUSE, TIME-LAG 4A (AEP,WG,UK)FUSE, TIME-LAG 4A	R155 R156	1-247-713-11 1-249-417-11		1K 1K	5 % 5 %	1/4W 1/4W
IC301 IC302 IC401	8-749-920-70 8-759-111-68 8-759-981-96	IC STK3102-3 IC UPC1237HA IC RC4560D	R157 R158 R159	1-246-545-00 1-246-545-00 1-249-417-11	CARBON CARBON (WG)CARBON	1M 1M 1K	5 % 5 % 5 %	1/4W 1/4W 1/4W
J101 J102 J103 J104	1 -565 -320 -51 1 -565 -320 -41 1 -565 -320 -51 1 -568 -250 -11	JACK, PIN 6P (TUNER/CD/TAPE1,RECOUT) JACK, PIN 6P (TAPE2/REC OUT) JACK, PIN 6P (ADAPTOR IN,OUT/DIRECT IN) JACK, PIN 2P (PHONO)	R160 R161 R162	1-249-417-11 1-249-417-11 1-249-417-11	(WG)CARBON (WG)CARBON (WG)CARBON	1K	5 % 5 % 5 %	1/4W 1/4W 1/4W
L301 L301	*1 -420 -872 -00 *1 -420 -872 -31	(E,AEP,WG,UK)COIL, AIR CORE (Canadian)COIL, AIR CORE	R163 R164 R201	1-249-417-11 1-249-417-11 1-249-417-11	(WG)CARBON (WG)CARBON CARBON		5 % 5 % 5 %	1/4W 1/4W 1/4W
L351 L351	*1 -420 -872 -00 *1 -420 -872 -31	(E,AEP,WG,UK)COIL, AIR CORE (Canadian)COIL, AIR CORE	R202 R203 R204	1-247-700-11 1-247-717-11 1-247-722-11	CARBON CARBON CARBON	100 2.2K 5.6K	5 % 5 % 5 %	1/4W 1/4W 1/4W
L401 L402 L451 L452	1-413-101-00 1-413-101-00 1-413-101-00 1-413-101-00	(WG)COIL INPUT (WG)COIL INPUT (WG)COIL INPUT (WG)COIL INPUT	R205 R206 R208	1-249-753-15 1-249-753-15 1-247-170-00	CARBON CARBON CARBON	4.7M 4.7M 43K	5 %	1/4W 1/4W 1/4W
Q201 Q202 Q203	8-729-177-42 8-729-194-57 8-729-713-36	TRANSISTOR 2SD774-3 TRANSISTOR 2SC945P TRANSISTOR 2SA733Q	[Note:	Note:			

Note:
The components identified by mark A or dotted line with mark are critical for safety.
Replace only with part number specified.

Note: Les composants identifiés par une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spéci-fié.

Ref.No.	Part No.	Description			
R209	1-247-152-00	CARBON	7.5K	5 %	1/4W
R210	1-249-464-11	CARBON	39K	5 %	1/4W
R211	1-249-465-11	CARBON	47K	5 %	1/4W
R212	1 -249-465-11	CARBON	47K	5 %	1/4W
R213	1 -247-722-11	CARBON	5.6K	5 %	1/4W
R214	1 -247-693-11	CARBON	27	5 %	1/4W
R215	1 -247 -754 -11	CARBON	1.5K	5 %	1 /2W
R216	1 -247 -754 -11	CARBON	1.5K	5 %	1 /2W
R217	1 -247 -750 -11	CARBON	680	5 %	1 /2W
R218	1-249-462-11	CARBON	22K	5 %	1/4W
R219	1-249-465-11	CARBON	47K	5 %	1/4W
R220	1-247-749-11	CARBON	560	5 %	1/2W
R221	1 -247 -717 -11	CARBON	2.2K	5 %	1/4W
R222	1 -247 -725 -11	CARBON	10K	5 %	1/4W
R223	1 -249 -465 -11	CARBON	47K	5 %	1/4W
R224	1 -247 -721 -11	CARBON	4.7K	5 %	1/4W
R225	1 -247 -752 -11	CARBON	1K	5 %	1/2W
R226	1 -247 -752 -11	CARBON	1K	5 %	1/2W
R227	1-247-752-11	(E,WG,Canadia		5%	1/2W
R227	1-247-239-00	(AEP)CARBO		5 %	1/2W
R228 R228	1-247-752-11	(E,WG,Canadia CARBC (AEP)CARBC	N 1K	5% 5%	1/2W 1/2W
R251	1-249-417-11	CARBON	1K	5 %	1 /4W
R252	1-247-700-11	CARBON	100	5 %	1 /4W
R253	1-247-717-11	CARBON	2.2K	5 %	1 /4W
R254	1 -247 -722 -11	CARBON	5.6K	5 %	1/4W
R255	1 -249 -753 -15	CARBON	4.7M	5 %	1/4W
R256	1 -249 -753 -15	CARBON	4.7M	5 %	1/4W
R258	1-247-170-00	CARBON	43K	5 %	1/4W
R259	1-247-152-00	CARBON	7.5K	5 %	1/4W
R260	1-249-464-11	CARBON	39K	5 %	1/4W
R261	1-249-465-11	CARBON	47K	5 %	1/4W
R262	1-249-465-11	CARBON	47K	5 %	1/4W
R263	1-247-722-11	CARBON	5.6K	5 %	1/4W
R301	1-247-713-11	CARBON	1K	5 %	1/4W
R302	1-249-599-11	CARBON	91K	5 %	1/4W
R303	1-249-668-11	CARBON	620	5 %	1/2W
R304	1-247-713-11	CARBON	1K	5 %	1/4W
R305	1-247-707-11	CARBON	390	5 %	1/4W
R306	<u>1-212-990-00</u>	FUSIBLE	220	5 %	1/2W F
	△1-212-950-00	FUSIBLE	4.7	5%	1/2W F
	△1-212-950-00	FUSIBLE	4.7	5%	1/2W F
	1-217-611-00	METAL PLATE	0.1	10%	2W
R310	1-217-611-00	METAL PLATE	0.1	10%	2W
R311	1-247-717-11	CARBON	2.2K	5%	1/4W F
R312	1-249-460-11	CARBON	15K	5%	1/4W
	△ 1-212-962-00	FUSIBLE	15	5 %	1/2W F
	△ 1-212-962-00	FUSIBLE	15	5 %	1/2W F
	1-247-891-00	CARBON	330K	5 %	1/4W
R316	1 -247 -725 -11	CARBON	10K	5 %	1/4W
R317	1 -247 -887 -00	CARBON	220K	5 %	1/4W
R318	1 -247 -881 -00	CARBON	120K	5 %	1/4W
R319	1 -249-461 -11	CARBON	18K	5 %	1/4W
R320	1 -247 -721 -11	CARBON	4.7K	5 %	1/4W
R321	1 -249-462 -11	CARBON	22K	5 %	1/4W
R323	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R324	1-247-727-11	CARBON	10	5%	1/2W
R325	1-247-747-11	CARBON	470	5%	1/2W

Ref.No.	Part No.	Description				
R326	1-249-721-11	CARBON	100K	5 %	1/2W	
R327	1-247-708-11	CARBON	470	5 %	1/4W	
R351	1-247-713-11	CARBON	1K	5 %	1/4W	
R352	1-249-599-11	CARBON	91K	5 %	1/4W	
R353	1-249-668-11	CARBON	620	5 %	1/2W	
R354	1-247-713-11	CARBON	1K	5 %	1/4W	
	1-247-707-11 1-212-990-00 1-212-950-00	CARBON FUSIBLE FUSIBLE	390 220 4.7	5 % 5 % 5 %	1/4W 1/2W 1/2W	F F
R358 <u>↑</u>	1-212-950-00	FUSIBLE	4.7	5%	1/2W	F
R359	1-217-611-00	METAL PLATE	0.1	10%	2W	
R360	1-217-611-00	METAL PLATE	0.1	10%	2W	
R362	1-247-717-11 1-249-460-11 1-212-962-00	CARBON CARBON FUSIBLE	2.2K 15K 15	5 % 5 % 5 %	1/4W 1/4W 1/2W	F F
R364 A	1-212-962-00	FUSIBLE	15	5%	1/2W	F
R365	1-247-891-00	CARBON	330K	5%	1/4W	
R374	1-247-727-11	CARBON	10	5%	1/2W	
R375	1 -247 -747 -11	CARBON	470	5 %	1/2W	
R376	1 -249 -721 -11	CARBON	100K	5 %	1/2W	
R377	1 -247 -708 -11	CARBON	470	5 %	1/4W	
	1-216-459-00 1-215-895-11 1-247-721-11	METAL OXIDE METAL OXIDE CARBON	2.7K 3.3K 4.7K	5 % 5 % 5 %	2W 2W 1/4W	F
R404 R405	1-247-721-11 1-247-706-11	CARBON (E,AEP,UK,Can		5%	1/4W	
		CARBON		5%	1/4W	
R406	1-249-469-11	CARBON	100K	5 %	1/4W	
R407	1-247-700-11	CARBON	100	5 %	1/4W	
R408	1-249-469-11	CARBON	100K	5 %	1/4W	
R409	1-247-713-11	CARBON	1K	5%	1/4W	
R410	1-247-713-11	CARBON	1K	5%	1/4W	
R411	1-247-725-11	CARBON	10K	5%	1/4W	
R412	1-249-484-11	CARBON	6.8	5 %	1/2W	
R413	1-247-739-11	CARBON	100	5 %	1/2W	
R414	1-247-138-00	CARBON	2K	5 %	1/4W	
R415	1-247-700-11	CARBON	100	5 %	1/4W	
R416	1-214-937-00	CARBON	1M	5 %	1/2W	
R417	1-249-844-11	CARBON	56K	5 %	1/2W	
R418	1-249-818-11	CARBON	4.7K	1 %	1/2W	
R419	1-247-713-11	CARBON	1K	5 %	1/4W	
R431	1-247-713-11	(WG)CARBON	1K	5 %	1/4W	
R432	1-247-713-11	(WG)CARBON	1K	5 %	1/4W	
R455	1-247-706-11	(E,AEP,UK,Cana CARBON	33 ₀	5 %	1/4W	
R456	1-249-469-11	CARBON	100K	5 %	1/4W	
R457	1-247-700-11	CARBON	100	5 %	1/4W	
R458	1-249-469-11	CARBON	100K	5 %	1/4W	
R459	1-247-713-11	CARBON	1K	5 %	1/4W	
R460	1-247-713-11	CARBON	1K	5 %	1/4W	
R461	1-247-725-11	CARBON	10K	5 %	1/4W	
R462	1-249-484-11	CARBON	6.8	5 %	1 /2W	
R463	1-247-739-11	CARBON	100	5 %	1 /2W	
R465	1-247-700-11	CARBON	100	5 %	1 /4W	

Note:
The components identified by mark A or dotted line with mark are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque A sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description
R466 R467 R468	1-214-937-00 1-249-844-11 1-249-818-11	CARBON 1M 5% 1/2W CARBON 56K 5% 1/2W CARBON 4.7K 1% 1/2W
R469 R481 R482	1-247-713-11 1-247-713-11 1-247-713-11	CARBON 1K 5% 1/4W (WG)CARBON 1K 5% 1/4W (WG)CARBON 1K 5% 1/4W
R 902 R 903	1-247-727-11 1-247-727-11	(WG)CARBON 10 5% 1/2W (WG)CARBON 10 5% 1/2W
RT301 RT351	1 -237-455-11 1 -237-455-11	RES, ADJ, CARBON 500 RES, ADJ, CARBON 500
RV101 RV102 RV103 RV104	1-238-448-11 1-238-446-11 1-238-447-11 1-237-472-11	RES, VAR, CARBON 150K/150K (BALANCE) RES, VAR, CARBON 250K/250K (TREBLE) RES, VAR, CARBON 25K/500K (BASS) RES, VAR, CARBON 120K/120K(ATTENUATOR)
RY301	1-515-501-00	RELAY
\$201 \$202 \$203	1-571-824-11 1-571-826-11 1-571-823-11	SWITCH, ROTARY (INPUT SELECTOR) SWITCH, ROTARY (INPUT SELECTOR) SWITCH, ROTARY SLIDE(REC OUT SELECTOR)
S204 S205 S206 S207	1-571-&28-11 1-571-&27-11 1-571-&22-11 1-571-&25-11	SWITCH, PUSH (1 KEY)(SOURCE DIRECT) SWITCH, PUSH (1 KEY)(MUTING) SWITCH, ROTARY SLIDE (SPEAKER) SWITCH, ROTARY (MODE)
	1-571-111-11 11-554-920-31 11-570-307-11	SWITCH, PUSH (1 KEY)(CARTRIDGE) SWITCH, PUSH (AC POWER)(1 KEY)(POWER) (E)SWITCH, VOLTAGE CHANGE (VOLTAGE SELECTOR)
T1 A T1 A T1 A	1-449-685-11 1-449-687-11 1-449-688-11 1-449-689-11 1-449-690-11	(Canadian)TRANSFORMER, POWER (WG)TRANSFORMER, POWER (AEP)TRANSFORMER, POWER (UK)TRANSFORMER, POWER (E)TRANSFORMER, POWER
TM501	1-537-235-11	TERMINAL BOARD (SP)
TP301 TP351	1-535-135-00 1-535-135-00	BASE POST 14MM (10MM PITCH) 2P BASE POST 14MM (10MM PITCH) 2P
VH3	*1-564-321-00 1-564-320-00 *1-564-321-00	PIN, CONNECTOR 2P PIN, CONNECTOR 2P (AEP,UK,WG)PIN, CONNECTOR 2P
VH6	*1 -565 -792 -11 *1 -564 -321 -00 *1 -564 -241 -00	PIN, CONNECTOR 2P (AEP,UK,WG)PIN, CONNECTOR 2P PIN, CONNECTOR 4P
VH11 VH12	*1 -560 -595 -21 1 -564 -321 -00 1 -564 -320 -00 *1 -535 -141 -00	TERMINAL (WITH BASE) (Canadian,E)PIN, CONNECTOR 2P PIN, CONNECTOR 2P (E)BASE POST 22MM (10MM PITCH) 4P
	ACCESSORY & F	PACKING MATERIAL
	3-786-976-11 3-786-976-41	(Canadian,UK,E)MANUAL, INSTRUCTION (AEP,WG)MANUAL, INSTRUCTION
	*4-929-219-01 *4-929-263-11	CUSHION INDIVIDUAL CARTON

Note:
The components identified by mark A or dotted line with mark are critical for safety.
Replace only with part number specified.

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Ne les remplacer que par une pièce portant le numéro spécifié.